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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,370	12/21/2001	Jeffrey A. Trogolo	A-036	5277

7590 03/30/2006  
AGION TECHNOLOGIES  
60 Audubon Road  
Wakefield, MA 01880

EXAMINER

EBRAHIM, NABILA G

ART UNIT PAPER NUMBER

1618

DATE MAILED: 03/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/032,370	<b>Applicant(s)</b> TROGOLO ET AL.	
	<b>Examiner</b> Nabila G. Ebrahim	<b>Art Unit</b> 1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22,33,34,45 and 47-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22,33,34,45 and 47-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/18/05</u> | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Receipt of applicant's remarks/argument and the information disclosure statement filed on 11/18/05 is being acknowledged.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-22,33,34,45 and 47-62 rejection under 35 U.S.C. 103(a) as being unpatentable over Trogolo et al. US 6436422 in view of Michal et al. 6287285 and further in view of Schink et al. US 2001/0009831 is maintained.

#### ***Applicant argues that:***

Trogolo et al. teach liquid hydrophilic coating compositions, which when applied to various substrates and the solvent is allowed to evaporate, leaves an antimicrobial hydrophilic polymer film or coating on the substrate surface. The coatings may be applied to any number of substrates including medical devices such as stents ..., nothing would suggest that the coating compositions could have any utility beyond that of a coating or film forming material.

In response to this argument, the Examiner confirms that the composition of the current application was obvious to a skilled man the art. Furthermore, claiming of a new use, new function or unknown property, which is inherently present in the prior art, does not necessary make the claim patentable.

Nothing in either Trogolo et. al. or Schink et. al. nor in their combined teachings suggests, infers or motivates one to *form* antimicrobial additive particles comprising a plurality of particles of the antimicrobial active agent dispersed in a hydrophilic polymer let alone wherein such additive particles having an aspect ratio of greater than 2.

In response to this argument, the Examiner would like to refer the applicant to review the office action pages 3, and 4, which states that Trogolo is introduced for the combination of:

Hydrophilic polymer (polyurethane) **plus** zeolite, hydroxyapatite, ..... or other ion-exchange ceramics **plus** antibiotic metal ions like silver, copper or zinc **plus** a discoloration agent (ion-exchange ammonium ) **plus** zeolite exchangeable ions, which may be calcium, potassium, or iron ions, which are replaced with ammonium.

While Schick is represented for the disclosure of zeolites added to a polyurethane base material in a particle form to meet the requirement of the claims, which recite a microcapsule. However, thanks to the applicant who states "perhaps the Patent Office is unaware, however, antimicrobial zeolites and like antimicrobial agents are naturally and inherently in particle form". The statement serves the purpose of the rejection since the disclosures of the entire prior art is in the form of particles it is not an obligation for the Examiner to search the prior art for a microcapsule.

Neither reference teaches or suggests forming micron-sized particles. To respond to the allegations, the Examiner refers the applicant to the examples disclosed in Schick, where the examples described are carried out using a zeolite

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comprising silver ions from the company Shinned having an average particle size of from 0.6 to 2.5 .mum.

Again, and in view of the arguments stated by the applicant with regard to the relation between the particles size of an inorganic antimicrobial agent that greatly influence the performance of that antimicrobial agent. According to Dr. Trogolo the applicant claims that the use of larger particle size, even with lower silver contents, results in higher overall silver release and thus, improved performance.

To respond, the improvement of performance claimed by the applicant is not in the scope of the claims and hence is not an issue of examination.

Furthermore applicant argues that if there is nothing to suggest the formation of the particles, then certainly there is nothing to suggest the further incorporation of a dopant into such particles.

In response, it is the position of the examiner to remind the applicant of his statement regarding the antimicrobial zeolites and like antimicrobial agents are naturally and inherently in particle form. Consequently, and since the use of the zeolites is inherently a use of particles which is disclosed by Michal (see Michal, claim 17), then the suggestion of incorporation of a dopant into such particles is acceptable in the rejection.

N.B: applicant alleges that Michal et al. is cited in the statement of the rejection, no other reference to or discussion of Michal et al. is set forth in the rejection. In response the examiner would like the applicant to review the inclusion of Michal et al. in page 6, starting at line 4 in the office action.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabila G. Ebrahim whose telephone number is 571-272-8151. The examiner can normally be reached on 8:00AM-5:00PM.

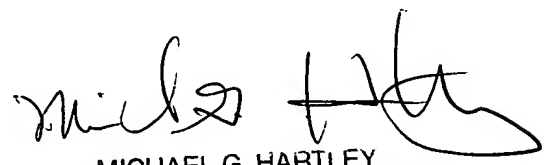
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hartley can be reached on 571-272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nabila Ebrahim

3/24/06



MICHAEL G. HARTLEY  
SUPERVISORY PATENT EXAMINER